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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/785,404	02/25/2004	Sang-hak Lee	1793.1151	9807
21171	7590	01/29/2011		
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			EXAMINER ADEGEYE, OLUWASEUN	
			ART UNIT 2481	PAPER NUMBER
			MAIL DATE 01/20/2011	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/785,404

**Applicant(s)**

LEE, SANG-HAK

**Examiner**

OLUWASEUN A. ADEGEYE

**Art Unit**

2481

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10/07/2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 2, 6, 8 - 11, 13 - 28, 30, 32, 35, 37, 40 - 44, 54 - 58, 78, 83, 85, 91 - 98 and 110 - 149 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02/25/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of Papers Received (PTO-302)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

Continuation of Disposition of Claims: Claims pending in the application are 1 - 2, 6, 8 - 11, 13 - 28, 30, 32, 35, 37, 40 - 44, 54- 58, 78, 83, 85, 91 - 98 and 110 - 149.

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments filed 10/07/2010 with respect to claim 1, 2, 20, and 41, have been fully considered but they are not persuasive.

In re page 20 of the applicants' argument, applicants argue with respect to claim 1 that the Inoue et al reference does not teach or suggest that the display unit and speaker included in the display apparatus [enclosure]. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the display unit and the speaker in the display apparatus [enclosure]) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In re page 21, applicants disclose that the Inoue et al reference does not disclose that the controller is connected to the external storage medium. In response, the examiner respectfully disagrees. Inoue et al clearly discloses a controller (remote controller) that can be connected to remote control I/F (43) and it can be seen from figure 1 that the remote controller and the external storage medium (100) are connected via a bus and a user can control the external storage medium through the remote controller because they are connected (see column 8, lines 54 – 60. "...The digital interface section 20 of the receiver 3 is adapted to operate under the control of the controlling portion 30 in accordance with user's instructions, so as to supply an external

device with one of the following three types of signals: a transport stream; both the digital video and audio signals; and the digital audio signal alone, via the I/O terminal 20T .....").

In re page 21, applicants' argue that the cited Inoue et al reference does not disclose a speaker to output audio signal. In response, the examiner respectfully disagrees. Inoue clearly discloses a speaker to output audio signal (see column 8, lines 14 – 19.".... The analog audio signals are supplied to a speaker of the monitor receiver for example, through an external output terminal 16, whereby voices and sounds are reproduced through the speaker ...").

In re page 21, applicants' argue that the cited Inoue et al reference does not disclose a display unit. In response, the examiner respectfully disagrees. Inoue discloses a main display unit I/F that can allow connection of a monitor so that images can be displayed (see fig. 1 and column 5, lines 26 – 30). Official notice was taken that both the concept and advantages of attaching a display unit to the display apparatus (10, 20, and 30) are well known and expected in the art. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to attach a display unit to the display apparatus via the I/F (44) so as to provide a means for displaying the TV broadcast signals or the stored video data from the external memory .

In re page 21, applicants argue that Inoue et al does not disclose a port disposed on the display apparatus. In response, the examiner respectfully disagrees. Inoue clearly discloses a port (I/F 45) that is disposed on the display apparatus (10., 20, 30) through which the received digital video signal and audio signal are transmitted from the

display apparatus (10, 20, 20) to the external storage medium (100) (see fig. 1 and column 8, lines 61 - 67. "...In addition, the receiver 3 of this embodiment is designed such that an external memory 100 is detachably connected thereto through the external memory interface 45. Thus, in this embodiment, the external memory interface 45 has a connector to which the external memory 100 is connectable, and an interface circuit through which data is exchanged between the receiver 3 and the external memory 100 .....").

In re page 22, applicants argue with respect to claim 20 that the cited Inoue et al reference does not teach the technical feature of setting the compression mode and the decompression mode. In response, the examiner respectfully disagrees. Column 7, lines 61 - 67 discloses an MPEG decoding section 141 for decompressing already compressed MPEG video and audio signals when the video and audio signals are selected by a user. Therefore when a user via a remote control selects a video or audio signal for reproduction, the examiner interprets this to be setting a mode for decompression. And the opposite goes for setting a compression mode when a user via a remote controller decides to store the received video and audio signal in the external storage medium 100 (see column 8, lines 45 - 60."..... As described before, the digital interface section 20 receives a multi-program transport stream containing MPEG-compressed video and audio signals derived from the descrambling section 131 and corresponding to a plurality of broadcast programs. The digital interface section 20 also receives digital video and audio signals of a single broadcast program separated and extracted from the transport stream by the demultiplexing section 132 and

decompressed by the MPEG decoding section 141. The digital interface section 20 of the receiver 3 is adapted to operate under the control of the controlling portion 30 in accordance with user's instructions, so as to supply an external device with one of the following three types of signals: a transport stream; both the digital video and audio signals; and the digital audio signal alone, via the I/O terminal 20T .....") (also see column 15, lines 30 – 39. "...The controlling portion 30 operates so as to cause the SDRAM 33 to temporarily store the data supplied from the demultiplexing section 132. When instruction for picking up data furnished by digital television broadcasting service is given by the user by means of, for example, a remote controller, the controlling portion 30 operates so as to cause the external memory element 100 to record the contents information and ATRAC-compressed audio data temporarily stored in the SDRAM 33 to be recorded in the external memory element 100 .....").

In re page 22, applicants' argue that the cited Inoue et al reference does not disclose a speaker to output the reproduced audio signal. In response, the examiner respectfully disagrees. Inoue clearly discloses a speaker to output audio signal (see column 8, lines 14 – 19.".... The analog audio signals are supplied to a speaker of the monitor receiver for example, through an external output terminal 16, whereby voices and sounds are reproduced through the speaker ...").

In re page 23, applicants argue that the cited Inoue reference does not disclose outputting the restored video signal and audio signal using the display apparatus. In response, the examiner respectfully disagrees. Inoue discloses a main display unit I/F that can allow connection of a monitor so that images can be displayed (see fig. 1 and

column 5, lines 26 – 30). Official notice was taken that both the concept and advantages of attaching a display unit to the display apparatus (10, 20, and 30) are well known and expected in the art. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made attach a display unit to the display apparatus via the I/F (44) so as to provide a means for displaying the TV broadcast signals or the stored video data from the external memory . Inoue also clearly discloses a speaker to output audio signal (see column 8, lines 14 – 19.".... The analog audio signals are supplied to a speaker of the monitor receiver for example, through an external output terminal 16, whereby voices and sounds are reproduced through the speaker ...").

In re page 23, applicants argue with respect to claim 2 that the Inoue et al reference does not disclose wherein the controller, according to a request from the user and when the received digital video signal and/or audio signal are stored in the external storage medium, determines whether the received digital video signal and/or audio signal is to be output through the port. In response, the examiner respectfully disagrees. Inoue discloses that whenever an external memory 100 is connected to the port, information can be transferred between the display apparatus and the external storage medium but only when there is connection. Therefore the connection of the external memory 100 to the external memory I/F 45 is the determination that the received digital video and audio signal is to be output through the port (I/F 45) (see column 9, lines 18 – 24. ".....In this embodiment, when the external memory element 100 is connected to the receiver 3 through the external memory interface 45, the receiver 3 can upgrade its function by using data read from the external memory element 100 connected thereto or



reproduce and output video and audio data read from the external memory element 100 ..... ") (also see column 9, lines 42 – 49.".... . Thus, a user who wishes to use contents information provided by the digital television broadcasting service purchase an external memory element 100 that stores a browser and other necessary programs and data that are necessary for obtaining the contents information. The function for obtaining and using such contents information becomes available simply by connecting the external memory element to the external memory interface 45 ..... ").

In re page 25, applicants disclose that the rejection of claim 19 is improper and discloses that the examiner relies on a Miyatake reference. In response the examiner does not reject any of the claims using a Miyatake reference.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 2, 20, 41, 54 – 58, 64, 78, 83 - 98 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al (US 6,580,462 B2) in view Well known Knowledge in the art .

As to **claim 1**, Inoue discloses a display apparatus (14) connected with an external storage medium (45) disposed external to the display apparatus, the apparatus comprising (see fig. 1):

a receiving processor (32) that receives a television broadcasting signal (see column 5, lines 1 – 13) and at least a digital video signal and/or an audio signal from the external storage medium (see column 2, lines 32 – 38)

a controller (30) (see column 5, lines 14 – 25) that, if a user commands storage of the received digital video signal and audio signal, stores the received digital video signal and audio signal in the external storage medium (see column 8, lines 25 – 60) and

a display unit interface (44) to display the received digital video signal (see fig. 1 )

a speaker to output the received audio signal (see column 8, lines 13 – 19)

a port (external memory I/F) disposed on the display apparatus, through which the received digital video signal and audio signal are transmitted from the display apparatus to the external storage medium (see fig. 1. The cited interface is the port disposed on the display apparatus used for transferring data between the display apparatus and the external memory 100)

wherein the controller is connected to the external storage through the port (see fig. 1 and column 8, lines 37 – 44).

However Inoue does not disclose a display unit.

Official notice is taken that both the concept and advantages of attaching a display unit to a display interface are well known and expected in the art. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to attach a display unit to the display apparatus via a main unit display interface (44) so

as to provide a means for displaying the TV broadcast signals or the stored video data from the external memory.

As to **claim 20**, Inoue discloses a display apparatus connected with an external storage medium, the apparatus comprising

a receiving processor (30) that receives a digital video signal and an audio signal (see column 8, lines 45 – 60)

a compression (see column 7, lines 61 – 67) and decompression (14) unit that if a user requests storing of the received digital video signal and/or audio signal, is set to a compression mode, and compresses the digital video signal and/or the audio signal received from the receiving processor (see column 7, lines 61 – 67), and

if the user requests reproduction of the digital video signal and/or audio signal stored in the external storage medium, is set to a decompression mode, and restores the digital video signal and/or the audio signal received from an external storage medium; an output unit to output the reproduced digital video signal and/or audio signal (see column 7, lines 61 – 67. The above cited column discloses decompressing already compressed video and audio signals after user selection ); and

a controller (remote controller) that if the user requests the storage, controls the compression and decompression unit in the compression mode and stores the compressed digital video signal and/or audio signal compressed by the compression (see column 15, lines 30 – 39) and decompression unit in the external storage medium in real time (see column 7, lines 61 - 67), and

if the user requests the reproduction, outputs the digital video signal and/or audio signal from the external storage medium to the output unit through the compression and decompression unit (see column 7, lines 61 - 67).

Inoue discloses a speaker (see column 8, lines 15 - 19 and a display unit interface (44). However Inoue does not disclose a display unit.

Official notice is taken that both the concept and advantages of attaching a display unit to a display interface are well known and expected in the art. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to attach a display unit to the display apparatus via a main unit display interface (44) so as to provide a means for displaying the TV broadcast signals or the stored video data from the external memory.

As to **claim 41**, this is a method claim corresponding to the apparatus claim 20. Therefore, claim 41 is analyzed and rejected as previously discussed with respect to claim 20.

As to **claim 2**, Inoue discloses the display apparatus of claim 1. Inoue discloses wherein the controller, according to a request from the user and when the received digital video signal and/or audio signal are stored in the external storage medium, determines whether the received digital video signal and/or audio signal is to be output through the port. Inoue discloses that whenever an external memory 100 is connected to the port, information can be transferred between the display apparatus and the external storage medium but only when there is connection. Therefore the connection of the external memory 100 to the external memory I/F 45 is the determination that the

received digital video and audio signal is to be output through the port (I/F 45) (see column 9, lines 18 – 24. “.....In this embodiment, when the external memory element 100 is connected to the receiver 3 through the external memory interface 45, the receiver 3 can upgrade its function by using data read from the external memory element 100 connected thereto or reproduce and output video and audio data read from the external memory element 100 .....”) (also see column 9, lines 42 – 49.”.... . Thus, a user who wishes to use contents information provided by the digital television broadcasting service purchase an external memory element 100 that stores a browser and other necessary programs and data that are necessary for obtaining the contents information. The function for obtaining and using such contents information becomes available simply by connecting the external memory element to the external memory interface 45 .....”).

As to **claim 81**, Inoue discloses the display apparatus of claim 1, wherein the received digital video and/or audio signal are stored in the external storage medium in a real time manner (figure 1 discloses a tuner 11 for receiving TV broadcast signals and storing them on external memory 100. see column 2, lines 7 - 12).

As to **claim 83**, Inoue discloses the display apparatus of claim 2. Inoue discloses another external memory (100). However Inoue does not disclose wherein the external storage medium is incorporated in a PDA.

Official notice is taken that the concept and the advantages of wherein the external storage medium can be incorporated in a PDA are well known and expected in the art. Thus it would have been obvious to one of ordinary skill in the art at the time the

invention was made to have incorporated an external storage medium in a PDA so that a user can be able to view whatever he has recorded on the go.

As to **claims 84 and 85** grounds for rejecting claim 83 apply to claims 84 and 85 in its entirety.

As to **claims 54 – 56**, grounds for rejecting claim 1 apply to claims 54 – 56 in its entirety.

As to **claim 57**, Inoue discloses the reproducing apparatus of claim 55. However Inoue does not disclose wherein the interface is a Universal serial Bus (USB) interface.

Official notice is taken that the concept and the advantages of wherein the interface is a Universal serial Bus (USB) interface are well known and expected in the art. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated a USB controller and a USB interface as the controller and the interface of the display apparatus because USBs can offer a faster data transfer speed, lower power consumption by the USB devices and higher power supplied to the USB devices.

As to **claims 58**, grounds for rejecting claim 83 apply to claim 58 in its entirety.

As to **claim 78**, Inoue discloses a computer readable medium encoded with processing instructions for implementing a method of claim 30 performed by a processor (see column 19, lines 33 – 40).

As to **claims 91 – 95 and 97 - 98**, grounds for rejecting claims 83 – 85 respectively apply to claims 92 - 98 in its entirety.

As to **claim 96**, grounds for rejecting claim 57 apply to claim 96 in its entirety.

4. Claims 6, 8 – 11, 13 – 18, 21 – 27, 30, 32, 35, 37, 40, and 110 - 149 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al (US 2003/0192058 A1) in view of Plourde, JR (US 2003/010604 A1).

As to **claim 13**, this claim is similar to claim 1 only in that the limitation "a controller that forms a virtual file system for the external storage medium separate from a file system of the external storage medium, based on the file system from the external storage medium" and "the controller stores the received digital video signal and audio signal in the external storage medium in real time with reference to information generated on the basis of the virtual file system" is additionally recited.

Inoue discloses a file system for the external storage medium (see column 9, lines 42 – 62. ".....Thus, a user who wishes to use contents information provided by the digital television broadcasting service purchase an external memory element 100 that stores a browser and other necessary programs and data that are necessary for obtaining the contents information. The function for obtaining and using such contents information becomes available simply by connecting the external memory element to the external memory interface 45. The browser and other programs and data stored in the external memory element 100 connected to the external memory interface 45 are taken up by the receiver 3. In this case, the programs and data stored in the external memory element 100 are additionally written in the flash memory 34 by the operation of the controlling portion 30. The receiver 3 then executes programs such as the browser additionally written in the flash memory 34, whereby the user can obtain and use the

contents information provided by the digital television broadcasting services. Thus, a new function can be implemented on the receiver 3 by the additional registration of programs that are not inherently loaded on the receiver 3 ....").

However Inoue does not disclose a virtual file system that is separate from the file system.

Plourde discloses a controller that forms a virtual file system for the external storage medium and that the controller stores the received digital video signal and audio signal in the external storage medium in real time with reference to information generated on the basis of the virtual file system (see [067] and [068].".... Also included within operating system 353 is one or more device drivers that provides operating instructions to an internal or external storage device, such as storage device 373, and other peripheral devices not shown ..... The AV File System Manager 368 manages data about each recorded media content instance including where it is stored physically (i.e. cluster management, as described below) and the locations of I-Frames .....").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have added the virtual file system taught by Plourde to the apparatus of Inoue to provide a system that manages data about each recorded media content including where it is stored physically.

As to **claims 6 and 8 – 11**, grounds for rejecting claim 13 apply to claims 6, 8 – 11 in its entirety. Claim 8 additionally recites OSD. Inoue clearly discloses OSD (see column 8, lines 1 – 5 and column 11, lines 51 - 55).



As to **claims 14 – 18**, grounds for rejecting claim 13 apply to claims 14 - 18 in its entirety.

As to **claims 21 – 27**, grounds for rejecting claim 13 apply to claim 21 – 27 in its entirety.

As to **claims 30, 32, 35, 37 and 40** grounds for rejecting claim 13 apply to claims 30, 32, 35, 37 and 40 in its entirety.

As to **claims 110, 112, 114, 116, 120, 122, 124, 128, 129, 130, 131, 133, 138, 140, 145, 146, 147, 148 and 149** grounds for rejecting claim 13 apply to claims **110, 112, 114, 116, 120, 122, 124, 128, 129, 130, 131, 133, 138, 140, 145, 146, 147, 148 and 149** in its entirety.

As to claims **111, 117, 118, 119, 125, 126, 127, 135, 136, 137, 142, 143, 144 and 147** grounds for rejecting claim 57 apply to claims **111, 117, 118, 119, 125, 126, 127, 135, 136, 137, 142, 143, 144 and 147** in its entirety.

As to claims **113, 121, 132, 139**, grounds for rejecting claim 8 apply to claims **113, 121, 132, 139** in its entirety.

5. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue in view of Plourde as applied to claim 13 and further in view of Kovacevic (US 7,030,930 B2).

As to **claim 19**, Inoue in view of Plourde discloses the display apparatus of claim 13, wherein, when the digital video signal and/or audio signal are reproduced from the external storage medium, the controller displays the reproduced digital video signal and

the received digital video signal together using the output unit (see column 11, line 14 – column 12, line 55).

Inoue does not disclose the output unit in a Picture-In-Picture format or in a Picture-By-Picture format.

Kovacevic discloses the output unit in a Picture-In-Picture format or in a Picture-By-Picture format (see column 6, lines 14 – 33).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have added outputting picture-in-picture as taught by Kovacevic to the apparatus of Inoue in view of Plourde to provide a display apparatus where a user can watch two separate programs at the same time.

6. Claims 115, 123, 134 and 141 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue on view of Plourde as applied to claim 13 above, and further in view of Well Known knowledge in the art.

As to **claim 115**, Inoue on view of Plourde discloses the broadcasting signal receiver of claim 114. However they do not disclose wherein the management information includes time information corresponding to a storage capacity of the external storage medium, and list information of the at least one of video signals and audio signals stored on the external storage medium. Official notice is taken that the concept and the advantages of wherein the management information includes time information corresponding to a storage capacity of the external storage medium, and list information of the at least one of video signals and audio signals stored on the external storage medium are well known and expected in the art. Thus it would have been

obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the concept of including time information corresponding to a storage capacity of the external storage medium and list information of the video or audio signals stored in the external storage medium so as to allow a user to be able to easily access the stored information from the displayed list.

As to **claims 123, 134 and 141**, grounds for rejecting claim 115 apply to claims 123, 134 and 141 in its entirety.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLUWASEUN A. ADEGEYE whose telephone number is (571)270-1711. The examiner can normally be reached on Monday - Friday 7:30 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter-Anthony Pappas can be reached on 571-272-7646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

Art Unit: 2481

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

12/17/2010

/O.A/

/Peter-Anthony Pappas/  
Supervisory Patent Examiner, Art Unit 2481